

Appl. No.: 10/080,023

Attorney Docket No.:10541-1281

II. Listing of Claims

1. (Previously Presented) A solenoid-operated valve assembly for an automatic transmission of a motor vehicle, comprising:

a valve body having a control chamber, mutually spaced first, second and third ports communicating with the control chamber, the valve body further having a damping orifice connecting an end volume and a fluid reservoir;

a valve spool supported for movement along the control chamber, including a shank, a first land, adapted to open and close the first port and second port, and a second land located at an opposite end of the shank from the first land and adapted to open and close the third port, and wherein the second land has a larger diameter than a diameter of the first land;

a spring urging the valve spool to move along the control chamber; and

a solenoid assembly having an armature axially displaceable in response to an electric signal supplied to a coil, the armature urging the valve spool to move along the control chamber.

2-4. Cancelled.

5. (Previously Presented) The valve assembly of Claim 1 wherein the second land has a larger diameter of between 4 and 10.5mm than the first land wherein the diameter of the first land is between 3 and 10mm.

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6. (Previously Presented) The valve assembly of Claim 1 wherein the first port is adapted for connection to a source of supply pressure, the third port is adapted for connection to the source of low pressure, and the second port is adapted to produce control pressure achieved by balancing supply flow from the first port, vent flow to the third port, and control flow to and from a load.

7. (Previously Presented) A solenoid-operated valve assembly for an automatic transmission of a motor vehicle, comprising:

a valve body having a control chamber, first, a second and third ports spaced mutually along, and communicating with the control chamber,

a valve spool located within the control chamber, including a shank, a first land, adapted to open and close the first port and having a first end and second end, a second land located at an opposite end of the shank and adapted to open and close the third port, the second land having a larger diameter of between 4 and 10.5mm, than the diameter of the first land wherein the diameter of the first land is between 3 and 10mm;

a damping orifice facing the first end, connecting the control chamber adjacent the first end with fluid reservoir;

a spring urging the valve spool to move along the control chamber; and

a solenoid assembly having an armature axially displaceable in response to an electric signal supplied to a coil, the armature urging the valve spool to move along the control chamber.

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8. Cancelled.

9. (Previously Presented) The valve assembly of Claim 7 wherein the first port is adapted for connection to a source of supply pressure, the third port is adapted for connection to the source of low pressure, and the second port is adapted to produce control pressure achieved by balancing supply flow from the first port, vent flow to the third port, and control flow to and from a load.

10-16. Cancelled.

17. (Previously Presented) The valve assembly of claim 1 further comprising a leak path between the first land and the valve body for filling the end volume and the fluid reservoir.

18. (Previously Presented) The valve assembly of claim 7 further comprising a leak path between the first land and the valve body for filling the fluid reservoir.